



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|--------------------------------------|---------------------------------|-----------------------------|
| 10/575,771 | 04/12/2006 | Cornelis Johannes Adrianus Schetters | NL03 1227 US | 3541 |
| 65913 | 7590 | 04/20/2009 | | |
| NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131 | | | EXAMINER BEHM, HARRY RAYMOND | |
| | | | ART UNIT 2838 | PAPER NUMBER |
| | | | NOTIFICATION DATE 04/20/2009 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Art Unit: 2838

Continuation of 11:

Specification

The title of the invention has been entered and the objection removed.

Claim Objections

The claim objections to amended claims 3-5 have been withdrawn.

Response to Arguments

Applicant's arguments filed 4/9/09 have been fully considered but they are not persuasive. Applicant argues Balakrishnan ('369) does not teach a single diode rectifier. However, Balakrishnan unequivocally teaches a single diode rectifier 106 in Figure 3 which rectifies the AC voltage from 80 into a DC voltage. Examiner notes Applicant has not claimed a single diode rectifier connected to a 120 VAC commercial line and nothing in the claim language prohibits the single diode rectifier from being in the secondary. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant further argues the cited portions in the specification do not teach a single diode rectifier. However, the description in the specification of single diode rectifier 106, or the lack thereof, does not alter that 106 rectifies the AC voltage from 80 into a DC voltage. Nevertheless, the description in column 3, lines 44-46, support that diode 106 is a single diode rectifier since the input AC voltage from 80 is rectified into a DC voltage. One of even minimal skill in the art would recognize single diode rectifier 106 half wave rectifies the AC voltage from 80 into DC voltage.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant argues Examiner relies upon improper hindsight reasoning. However, the use of single diode rectifiers, π filters and non-electrolytic capacitors for decoupling and filtering were well known in the art to produce known and repeatable results. Single diode rectifiers were known to perform half wave rectification, π filters were known to low pass filter noise bi-directionally and non-electrolytic capacitors were known to have a lower ESR than electrolytic capacitors which makes non-electrolytic capacitors superior for implementation as decoupling capacitors or filtering high frequency noise. It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a device, such as single diode rectifiers, π filters and non-electrolytic capacitors, for their known functions.

Applicant argues the π filter of Saleh ('114) is used in a DC/DC converter, not an AC/DC converter. Examiner points out the proposed insertion of the π filter of Saleh would be on DC side of the rectifier D1 of the Kayser ('212) reference, not on the AC side, and the π filter would perform the same function as explicitly taught by Saleh, to

Art Unit: 2838

smooth and the filter the DC input voltage. Contrary to Applicant's arguments that the circuits of Kayser ('212) and Saleh ('114) are somehow too different, one of ordinary skill, and the physics would clearly dictate, that the π filter of Saleh would benefit the circuit of Kayser by smoothing the input voltage and bi-directionally filtering noise.

Applicant further argues there is no reason to place a non-electrolytic capacitor in parallel with an electrolytic capacitor. However, it was well known that a non-electrolytic capacitor has a lower ESR than an electrolytic capacitor and was therefore superior at filtering high frequency noise, as was clearly shown in Figure 1a of Saleh.

With respect to Claim 3, Applicant argues Balakrishnan ('514) does not teach to low pass filter and limit inrush current with resistor 111 or coil 119. However, one of ordinary skill would have recognized the function of the components from depiction in Figure 1 and would not require an explicit statement in the specification.

Applicant again argues there is no reason to place a non-electrolytic capacitor in parallel with an electrolytic capacitor although it was well known that a non-electrolytic capacitor has a lower ESR than an electrolytic capacitor and was therefore superior at filtering high frequency noise and acting as a decoupling capacitor, as was clearly shown in Figure 1a of Saleh. Applicant argues that motivation can only come from wording in the specification but ignores the teaching from the Figures and what was known to one of ordinary skill in the art.

Applicant argues the dependent claims are allowable since the independent claims should be allowed, however, the claims are properly rejected for the reasons indicated above.